

Clean Version of Replacement Claims

In the Claims

Please amend claim 1 as follows:

Subcl
G1

1. (Amended) A firestop device for providing a passage through a partition in a structure, comprising:

- (a) a housing; and
- (b) firestop material arranged within said housing;

said housing including at least one frangible connection defining a removable band.

Remarks

Claim 1 has been amended to delete the limitation that the frangible connection transects the housing. This amendment broadens the scope of claim 1. Claims 1-18 remain pending in the application. Applicant respectfully acknowledges that claim 2 contains allowable subject matter.

Claim Rejections - 35 USC §103

Claims 1 and 3-18 stand rejected under 35 USC §103(a) as being unpatentable over Münzenberger et al. (U.S. Patent No. 6,161,873) in view of Harbeke (U.S. Patent No. 4,748,787). Claim 1, as amended, and the remaining claims, as contained in the application as filed, are believed to be patentable over Münzenberger et al. and Harbeke for the following reasons.

Independent claim 1, as amended, is directed to a firestop device including a housing and firestop material arranged in the housing, wherein the housing includes at least one frangible connection defining a removable band. Similarly, independent claim 18 discloses a firestop device including a plurality of longitudinally arranged frangibly connected circumferential bands. The frangible connections allow unnecessary bands that extend beyond the partition after the concrete has been poured to be readily removed by a user. In this manner, the height of the device can be modified to correspond to the thickness of the partition.

Neither Münzenberger et al. or Harbeke, whether taken alone or in combination, discloses, teaches, or suggests such a device. In particular, neither reference discloses a device including a frangible connection defining a removable band or a device including a plurality of frangibly connected circumferential bands.

Münzenberger et al. discloses a masonry lead-in fixture including a housing having a flange, an intumescent mass, and a partition located in the housing. As noted by the Examiner, however, Münzenberger et al. fails to disclose a device including at least one frangible connection transecting the housing defining a removable band.

Harbeke does not cure the deficiencies of Münzenberger et al. Applicant respectfully urges that certain features of the Harbeke reference have been overstated or mischaracterized by the Examiner. In particular, Applicants disagree with the Examiner's assertion that "Harbeke teaches that it is known in the art to provide at least one frangible connection (12,14) transecting the housing defining a removable band axial lengths."

Harbeke does not teach or disclose a housing including at least one frangible connection defining a removable band. Rather, Harbeke discloses top and bottom spacer collars 12 and 14 constructed of a frangible material. Harbeke, however, fails to disclose a frangible connection and, because Harbeke does not disclose a device having a frangible connection, it follows that Harbeke also fails to disclose a frangible connection defining a removable band. In addition, Harbeke fails to disclose a housing including a frangible connection. Harbeke merely discloses separate spacer collars constructed of a frangible material, such as Styrofoam, that are slid over a pipe and are held thereto by friction. (Harbeke at col. 3, lines 49-56). The spacer collars, however, do not form a frangible connection with a housing. As such, the spacer collars do not allow anything to be readily removed from a housing in order to adapt the height of the device to the thickness of the partition.

The Harbeke device is installed by first cutting the pipe stub 24 to the length D which is the same as the depth, or thickness, of the concrete barrier 42. (Harbeke at col. 4, lines 31-33). The spacer collars are formed of a frangible material to allow them to be "dug out" where necessary. (Harbeke at col. 4, lines 58-60). Thus, it is clear that the spacer collars of Harbeke are not "frangible connections" and that the spacer collars differ both structurally and functionally from the frangible connections of present invention.

As noted in M.P.E.P. §2143, one of the requirements to show a prima facie case of obviousness is that the prior art references when combined must teach or suggest all the claim limitations. Since neither Münzenberger et al. or Harbeke teach a housing including at least one frangible connection defining a removable band, it is not seen how any of the claims can be considered obvious over this combination of references. Reconsideration is requested.

Applicants also respectfully disagree with the Examiner's conclusion that it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the frangible connection of the housing of Harbeke with the firestop device of Münzenberger et al. in order to provide a snug fit of the pipe/housing.

To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the Examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references. In the subject application, this burden has not been met. The Examiner has not pointed to any teaching, express or implied, in the references that would suggest the claimed invention or any teaching in the prior art that suggests that the teachings could or should be combined. Nor has the examiner presented a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references. Moreover the Münzenberger et al. and Harbeke devices are complete and functional in themselves, so there would be no reason to modify them in any manner. And, as indicated above, even if one were to make the modification suggested by the Examiner, the combination would not contain all of the claim limitations.

Nowhere in the specification of either reference is there any suggestion or mention to modify the Münzenberger et al. device in the manner suggested. In fact, the spacer collars of Harbeke are provided to allow standard female/female coupling joint 40 to be attached to the top and bottom ends of the pipe stub as shown in Fig. 4. (Harbeke at col. 4, lines 60-64) Thus, the motivation for combining the references provided by the Examiner (namely, to provide a snug fit of the pipe/housing) is inconsistent with the reason for providing this feature set forth in the Harbeke reference itself. Moreover, there is no indication that the top or bottom ends of the Münzenberger et al. device are intended to be attached to couplings. In fact, the presence of the flange 4 on the bottom end of the Münzenberger et al. device would make it impossible to "dig out" the collar if it were provided at the bottom end of the device. The flange would also make it impossible to attach a coupling to the bottom end of the

Münzenberger et al. device even if the spacer collar were somehow "dug out." Thus, there is no reason to make the suggested modification.

In summary, since neither Münzenberger et al. or Harbeke, or any of the remaining cited references, whether taken alone or in combination, discloses, teaches, or suggests a device as defined in independent claims 1 and 18, these claims are believed to be allowable over the cited references. The remaining dependent claims, as depending from allowable claims, are also deemed to be in condition for allowance. Since all claims are believed to be patentably distinguishable from the prior art, allowance of the claims is respectfully solicited.

Please charge any fees required to enter this Amendment or credit any overpayments to Deposit Account No. 13-3723.

Registration Number 39,326	Telephone Number (651) 736-4713
Date December 12, 2002	

Respectfully submitted,

By David B. Patchett
David B. Patchett

Office of Intellectual Property Counsel
3M Innovative Properties Company
P.O. Box 33427
St. Paul, Minnesota 55133-3427
Facsimile: (651) 736-3833



Appendix A

Version with Markings to Show Changes Made

RADKE, DuWayne C. et al.

Serial No. 09/904,124

Filed: July 12, 2001

For: PASS-THROUGH FIRESTOP DEVICE

In the Claims

Claim 1 has been amended as follows:

1. (Amended) A firestop device for providing a passage through a partition in a structure, comprising:

- (a) a housing; and
- (b) firestop material arranged within said housing;

said housing including at least one frangible connection [transecting said housing] defining a removable band.

RECEIVED
DEC 20 2002
GROUP 3600